

## Claims

1. A method of transmitting a data packet from a first transmitting/receiving device to a second transmitting/ receiving device, comprising the following steps:
  - 5 a) transmission of at least two transmit authorizations from the second transmitting/receiving device to the first transmitting/receiving device;
  - b) transmission of the data packet from the first transmitting/receiving device to the second transmitting/receiving device following the reception of transmit authorizations;
  - 10 c) interruption of the transmission of transmit authorizations from the second transmitting/receiving device to the first transmitting/receiving device following the reception of the data packet.
  - 15 d) interruption of the transmission of transmit authorizations from the second transmitting/receiving device to the first transmitting/receiving device following the reception of the data packet.
2. A method according to Claim 1, further comprising the following steps: at least two transmit authorizations are sent from the second transmitting/receiving device to the first transmitting/receiving device when a further data packet is expected, and the transmission of the transmit authorizations from the second transmitting/receiving device to the first transmitting/receiving device is interrupted again as soon as the second transmitting/receiving device has received the further data packet.
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3. A method according to Claim 1, further comprising the following steps: following the interruption of the transmission of transmit authorizations from the second transmitting/receiving device to the first transmitting/receiving device, at least two transmit authorizations are sent from the second transmitting/receiving device to a third transmitting/receiving device, and the transmission of the transmit authorizations from the second transmitting/receiving device to the third transmitting/receiving device is interrupted as soon as a data packet from the third transmitting/receiving device has been received in the second transmitting/receiving device.
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4. A method for sending transmit authorizations from a first transmitting/receiving device to a second transmitting/receiving device, wherein the transmit authorizations are
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sent to the second transmitting/receiving device in a first time period and wherein the first time period is shorter than a second time period which adjoins the first time period and in which no transmit authorizations are sent to the second transmitting/receiving device.

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5. A method according to Claim 1 or 4, the time intervals between two transmit authorizations fulfilling predetermined delay jitter requirements.

6. A method according to Claim 4, further comprising the step: at least in a time slot of  
10 the second time period, transmit authorizations are sent to a third transmitting/receiving device.

7. A control centre for a multiple access system comprising a control unit for the controlled transmission of transmit authorizations to transmitting/receiving devices,  
15 wherein the control unit is capable of sending at least two transmit authorizations to a transmitting/receiving device and of interrupting the transmission of the transmit authorizations to the one transmitting/receiving device as soon as the control centre has received a data packet from the one transmitting/receiving device.

20 8. A control centre according to Claim 7, the control centre having the form of a head end or hub of a HFC- or HFR system, a control centre of a hyperLAN system, or a base station of a LMDS- or UMTS-system, and the transmitting/receiving devices each having the form of a cable modem or radio station.

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